



ATTORNEY DOCKET NO. HAR62 001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Beadle, et al.

RECEIVED

OCT 13 2004

Serial No.: 09/977,362

Art Unit: 3662

Filed: October 16, 2001

Examiner: Unassigned

GROUP 3600

Title: SYSTEM AND METHOD FOR AN IN-SERVICE DECISION-DIRECTED
SIGNAL TO NOISE RATIO ESTIMATOR

INFORMATION DISCLOSURE STATEMENT

The Honorable Commissioner of
Patents and Trademarks
Washington, DC 20231

Sir:

Copies of the below listed documents are enclosed for consideration in the examination
of the subject application.

FOREIGN PATENTS

<u>Patent No.</u>	<u>Patentee(s)</u>	<u>Publication Date</u>	Examiner's <u>Initials</u>
WO0070815	Nokia Networks OY	November 23, 2000	<i>EW</i>
WO0122623	Samsung Electronics, Co. Ltd.	March 29, 2001	<i>LW</i>

OTHER REFERENCES

Pauluzzi, D.R., et al., "A Comparison of SNR Estimation Techniques for the AWGN
Channel," IEEE Transactions on Communications, Vol. 48, No. 10, October 2000.

European Search Report for EP02023218

Laura 3/2 12/15/04



ATTORNEY DOCKET NO. HAR62 001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Beadle, et al.

Serial No.: 09/977,362

Art Unit: 3662

Filed: October 16, 2001

Examiner: Unassigned

RECEIVED
MAR 05 2002
GROUP 3600

Title: SYSTEM AND METHOD FOR AN IN-SERVICE DECISION-DIRECTED
SIGNAL TO NOISE RATIO ESTIMATOR

INFORMATION DISCLOSURE STATEMENT

The Honorable Commissioner of
Patents and Trademarks
Washington, DC 20231

RECEIVED
APR 25 2002
Technology Center 2600

Sir:

Copies of the below listed references are enclosed for consideration in the examination of the subject application.

U.S. PATENTS

<u>Patent No.</u>	<u>Patentee(s)</u>	<u>Issue Date</u>	<u>Examiner's Initials</u>
6,229,858	Stephens, <u>et al.</u>	May 8, 2001	L3H
6,219,095	Zhang, <u>et al.</u>	April 17, 2001	L3H
6,115,395	Norrell, <u>et al.</u>	September 5, 2000	L3H
6,111,921	Sudo, <u>et al.</u>	August 29, 2000	L3H
6,094,463	Stephens, <u>et al.</u>	July 25, 2000	L3H
5,594,758	Petranovich	January 14, 1997	L3H
5,440,582	Birchler, <u>et al.</u>	August 8, 1995	L3H
5,517,694	Iwasaki, <u>et al.</u>	October 20, 1992	L3H
4,835,790	Yoshida, <u>et al.</u>	May 30, 1989	L3H

OTHER REFERENCES

<u>Author</u>	<u>Title</u>	<u>Relevant Pages</u>	<u>Publication Information</u>	<u>Examiner's Initials</u>
Matzner, Rolf & Englberger, Ferdinand	"An SNR Estimation Algorithm Using Fourth- Order Moments"	119	<u>IEEE</u> 1994.	<i>LJ</i>
Pauluzzi, David & Beaulieu, Norman	"A Comparison of SNR Estimation Techniques for the AWGN Channel"	1681-1691	<u>IEEE Transactions on Communications</u> , Vol 48, No. 10 October 2000.	<i>LJ</i>
Lee, Jonghyun, Lee, ChongHyun, Chun, Joohwan, & Lee, Jong Huen	"Joint Estimation of the Space-Time Distributed Signal Parameters"		http://sclab.kaist.ac.kr/ publication/papers/ conference/ con_jhlee_ VTC2000fall_Joint....pdf	<i>LJ</i>
Benedict, Thomas & Soong, T.T.	"The Joint Estimation of Signal and Noise from the Sum Envelope"	447-454	<u>IEEE Transactions on Information Theory</u> Vol IT-13, No. 3 July 1967.	<i>LJ</i>
Beaulieu, Norman, Toms, Andrew & Pauluzzi, David	"Comparison of Four SNR Estimators for QPSK Modulations"	43-45	<u>IEEE Communications Letters</u> , Vol 4, No. 2 February 2, 2000	<i>LJ</i>
Celandroni, Nedo, Ferro Erina & & Potorti, Francesco	"Quality Estimation of PSK Modulated Signals"		<u>IEEE Communications Magazine</u> , July 1999.	<i>LJ</i>
Matzner, Rolf	"An SNR Estimation Algorithm for Complex Baseband Signals Using Higher Order Statistics"	41-52	Facta Universitatis (Nis) No. 6, 1993.	<i>LJ</i>

RECEIVED
MAR 05 2002
GROUP 3600

Matzner, Rolf, "Analysis and
Englberger, Design of a Blind
Ferdinand, & Statistical SNR Estimator
Siewert, Ralf

SW
<http://speedy.et.unibw-muenchen.de/forsch/ut/publ/aes10297>

RECEIVED

MAR 05 2002

Respectfully submitted,

GROUP 3600

By 

L. Lawton Rogers, III

Reg. No. 24,302

D. Joseph English

Reg. No. 42,514

Mark C. Comtois

Reg. No. 46,285

Patrick D. McPherson

Reg. No. 46,255

1667 K Street N.W., Suite 700
Washington, D.C. 20006
Telephone: (202) 776-7800
Telecopier: (202) 776-7801

Dated: March 1, 2002

WSH72644.1

 12/15/04